

**General Assembly**

Distr.: General  
27 July 2016

Original: English

**Seventy-first session**

Item 27 of the provisional agenda

**Advancement of women****Intensification of efforts to eliminate all forms of violence  
against women and girls****Report of the Secretary-General***Summary*

Pursuant to General Assembly resolution 69/147 on the intensification of efforts to eliminate all forms of violence against women and girls, the present report provides information on measures taken by Member States and United Nations bodies, funds and programmes and the specialized agencies to implement General Assembly resolutions 67/144 and 69/147. The report draws conclusions and proposes specific recommendations for future action.



## I. Introduction

1. In its resolutions 67/144 and 69/147, the General Assembly recognized that violence against women and girls is an impediment to their enjoyment of all human rights and their full participation in society, economy and political decision-making. It urged Member States to continue to adopt a more comprehensive approach to address all forms of violence against women and girls, including through measures that promote overall gender equality. Such measures should include, *inter alia*, the revision of discriminatory laws, strengthening women's economic autonomy and equal access to employment. It further urged Member States to address domestic violence as a matter of priority.

2. The Secretary-General was requested to submit to the General Assembly, at its seventy-first session, a report on measures taken by States and the United Nations system, including on the assistance of the United Nations entities to States to implement the resolution. The present report is submitted in accordance with that request, based on research and information available in the Global Database on Violence against Women,<sup>1</sup> and the Inventory on United Nations Activities to End Violence against Women,<sup>2</sup> both administered by UN-Women, as well as information received from Member States and entities of the United Nations. It covers the period since the previous report (A/69/222) up to 17 June 2016.

## II. Recent normative and policy developments

3. The 2030 Agenda for Sustainable Development affirmed the centrality of gender equality and the empowerment of women to the achievement of sustainable development, with the elimination of violence against women as a crucial component (General Assembly resolution 70/1, para. 20). The elimination of all forms of violence against women, as a target area (Sustainable Development Goal 5.2) is included under Goal 5, "to achieve gender equality and empower all women and girls", and it must be achieved within the deadlines set in the 2030 Agenda. That inclusion confirms that such violence is not only a barrier to gender equality, women's empowerment and overall sustainable development, but it is also an impediment to the achievement of other Goals, including on poverty eradication, health, education, food security and just and peaceful societies. As such, addressing violence against women should constitute a cross-cutting issue in policies and programmes aimed at the achievement of the other Goals. Principles of universality and human rights infuse the Sustainable Development Goals and commit that all women, regardless of their location, situation or circumstances, are entitled fully to enjoy their human rights and to lives free from violence. The 2030 Agenda builds on an existing international framework that addresses violence against women and girls, including the agreed conclusions of the Commission on the Status of Women at its fifty-seventh session, as a comprehensive road map for States to address such violence.

<sup>1</sup> United Nations Entity for Gender Equality and the Empowerment of Women (UN-Women), Global Database on Violence against Women, available from <http://evaw-global-database.unwomen.org>.

<sup>2</sup> UN-Women, Inventory of United Nations Activities to End Violence against Women, available from <http://evaw-un-inventory.unwomen.org/en..>

4. The Commission on the Status of Women, at its sixtieth session, reaffirmed that the realization of gender equality is crucial to progress across all Sustainable Development Goals and targets, as well as the interlinkages between violence against women and the achievement of gender equality and sustainable development (see E/2016/27-E/CN.6/2016/22).

5. Other bodies and mechanisms of the United Nations continued to address violence against women. Some of the issues they considered included intimate partner violence (see A/HRC/32/L.28/REV.1), as well as its impact on women's economic and political empowerment (see A/HRC/26/14), and on the effective exercise of women's human rights in all areas of life, including their right to citizenship (see A/69/368). They also considered persistent challenges to addressing such violence owing to existing discriminatory family or personal status laws (see A/HRC/29/40).

6. United Nations entities continued to support Member States to further advance the global legal and policy framework in addressing violence against women and girls. In particular, UN-Women continued to not only lead and coordinate the United Nations system work on gender equality, but also to provide support to relevant intergovernmental bodies in their deliberations on violence against women and girls. As the substantive secretariat for the Commission on the Status of Women, for example, it provided substantive and technical guidance to Member States on items relating to ending violence against women. The entity, as part of the inter-agency working group on indicators, also provided technical and substantive inputs and advocated strongly for the inclusion of ending violence against women in the targets of the 2030 Agenda for Sustainable Development.

### **III. Linkages between violence against women and women's empowerment**

7. Understanding violence against women as a continuum recognizes commonalities between different forms of violence, in public and private spheres. Such violence manifests and seeks to perpetuate inequality. Systematic gender inequality, discrimination and unequal power relations between men and women are recognized as the root causes of violence against women. Economic and political empowerment of women is thus imperative to eliminate such violence, as are sanctions for dealing with perpetrators. Evidence shows that the low economic and social status of women is a factor that may increase the risk of violence that women face, though the major risk factor is being female.

8. While gender inequality is known across time and context, the particularities of how it is experienced and what responses are available are rendered more complex for women located at the intersections of different dimensions of inequality. Such dimensions include race, disability, age and other factors. The 2030 Agenda for Sustainable Development commits to "leave nobody behind",<sup>3</sup> and obliges us to turn greater and more considered attention to such complexity as work to eliminate violence against women progresses.

9. The focus of the present report is on specific forms of violence, including domestic and intimate partner violence, violence and sexual harassment in workplaces,

<sup>3</sup> See General Assembly resolution 70/1.

and in public spaces more broadly, as well as violence against women when they exercise their political rights. The report will focus mainly on violence against women, though violence against girls will be covered within this context, as applicable.

10. These forms of violence are given attention here because of their particularly negative impact on women exercising their economic and political rights, including through their access to employment, voting and holding public office.

11. This report attends to three key linkages between economic and political empowerment of women and eliminating violence against them. Firstly, increasing economic independence is important to help survivors leave abusive relationships. In that context, the role of economic activity has been seen as a key to choice. It may enable a decision to leave or it may provide the means to sustain an independent life post-departure. Safety, however, can only be assured with other things in place, such as the perpetrator being kept away from the victim of abuse while the victim seeks to build a safe, independent life.

12. Second, increasing women's participation in political processes can raise the political dynamics towards gender equality and ending violence against women and girls. Finally, in exercising their economic and political rights, women often face violence and harassment, which impedes their overall empowerment. The following sub-sections will examine those interlinkages in more detail.

### **Intimate partner and domestic violence**

13. Intimate partner violence<sup>4</sup> is one of most widespread forms of violence against women, based on the data available. It is also the form of violence for which the most information, as well as examples of good and promising practices to address it, is available. It is commonly referred to as domestic violence, and both terms are used in the present report in alignment with the terminology used by information and data sources cited.

14. It is estimated that 35 per cent of women worldwide have experienced physical and/or sexual violence at some point in their lives, mostly by an intimate partner.<sup>5</sup> That prevalence is as high as 70 per cent in some countries.<sup>6</sup> Intimate partner violence can include depriving women of economic resources, or restricting their ability to exercise their political rights, including voting, or being a direct punishment against women who become leaders in their community (see A/HRC/23/50, para. 67).

15. Intimate partner and domestic violence cause more deaths than civil wars and entail much higher economic costs than those linked to homicides or civil wars (see A/HRC/29/40, para. 35). Individual women, communities and society at large

<sup>4</sup> According to the report of the Secretary-General on an in-depth study on all form of violence against women (A/61/122/Add.1), intimate partner violence includes a range of sexually, psychologically and physically coercive acts used against adult and adolescent women by a current or former intimate partner. It also includes economic violence, which consists of denying a woman access to and control over basic resources.

<sup>5</sup> World Health Organization (WHO), London School of Hygiene and Tropical Medicine and South African Medical Research Council, *Global and Regional Estimates of Violence against Women: Prevalence and Health Effects of Intimate Partner Violence and Non-partner Sexual Violence* (Geneva, WHO, 2013).

<sup>6</sup> UN-Women, "Violence against women prevalence data: surveys by country" (December 2012), available from [www.endvawnow.org/uploads/browser/files/vawprevalence\\_matrix\\_june2013.pdf](http://www.endvawnow.org/uploads/browser/files/vawprevalence_matrix_june2013.pdf).

all suffer as a consequence of such abuse. Data show that women who are exposed to intimate partner violence are employed in higher numbers in casual and part-time work (see A/69/368, para. 35), and that their earnings from formal wage work are 60 per cent lower, compared to women who do not experience such violence in both cases.<sup>7</sup> This form of violence can have a serious inter-generational effect, as there is evidence that children who witness violence at home are at greater risk of engaging in violent behaviour as adults.<sup>8</sup>

16. Legal challenges to intimate partner and domestic violence require adequate enforcement of legislation, as well as ending discriminatory provisions, such as family or personal status laws. Such family or personal status laws regulate marriage or similar unions and family relations in the areas of management of property, freedom of movement, the custody of children and divorce. Additional challenges currently include reservations to articles of the Convention on the Elimination of All Forms of Discrimination against Women on gender equality in the family and marriage (see CEDAW/C/GC/29, para. 3), or plural legal systems in many countries, where relations between married partners are determined by religious and customary laws and practices (ibid., para. 2).

17. Discriminatory family or personal status laws can restrict women's lives and choices in several ways. These include freedom of movement and enjoyment of economic and political rights. A recent analysis showed that in 18 out of 173 countries considered husbands can still lawfully prevent their wives from working.<sup>9</sup> A recent study explored the relationship between inequality in family law and levels of violence against women in 141 countries, concluding that they are strongly related.<sup>10</sup> Progress to revise such discriminatory laws has been uneven across regions, with successful outcomes in countries where there was longstanding mobilization by women's rights movements.<sup>11</sup>

18. The association between economic empowerment of women and intimate partner and domestic violence is often complex. The adverse impact of women's economic empowerment on violence against women in the short term, as the traditional gender roles may have been challenged, should be considered by adopting a more holistic approach to prevent violence.

19. The experience of intimate partner and domestic violence is a significant barrier to women's access, equal treatment and opportunities in economic and political life. As a result, it impedes women's empowerment and economic independence. On the other hand, women's access to work and economic resources has the potential to prevent violence against women in family and intimate relationships through increased negotiating power and economic means to support themselves to leave abusive relationships. Such efforts should be undertaken in

<sup>7</sup> World Bank, *Women, Business and the Law 2016: Getting to Equal* (Washington, D.C., 2015).

<sup>8</sup> WHO, *Global Status Report on Violence Prevention 2014* (Geneva, 2014).

<sup>9</sup> The term country, being used interchangeably with economy, by the World Bank, see World Bank, "How does the World Bank classify countries", available from <https://datahelpdesk.worldbank.org/knowledgebase/articles/378834-how-does-the-world-bank-classify-countries>.

<sup>10</sup> Valerie M. Hudson, Donna Lee Bowen and Perpetua Lynne Nielsen, "What is the relationship between inequity in family law and violence against women? Approaching the issue of legal enclaves", *Politics and Gender*, vol. 7, No. 4 (December 2011).

<sup>11</sup> UN-Women, *Progress of the World's Women 2015-2016: Transforming Economies, Realizing Rights* (New York, 2015).

parallel with efforts to prevent and respond to the violent behaviour of men against women. For example, data show that women's engagement in paid work and ownership of property are associated with significant reductions in marital violence.<sup>12</sup>

### **Sexual harassment in public spaces**

20. Women's and girls' mobility, and thus their access to economic, social and political life, is impacted by sexual harassment in public spaces, including in streets and public transportation. This form of violence against women has not been measured adequately, and it has gained little attention in national legal and policy frameworks. In the analysis of 173 countries, the World Bank showed that provisions covering sexual harassment in employment (114 countries) are common, while very few protect women from sexual harassment in public spaces (18 countries).<sup>7</sup>

### **Violence in workplaces**

21. Women are frequently subject to unwelcome scrutiny, harassment and violence at work, but data on that is limited.<sup>13</sup> Data, published in 2014 from a survey conducted in all Member States of the European Union, show that 55 per cent of women have experienced sexual harassment at least once since the age of 15. Of those women, 32 per cent reported that the perpetrator was somebody from the employment context, such as a colleague, a supervisor or a client.<sup>14</sup> Women often face increased risks of harassment and violence in particular contexts, such as when working outside the normal working hours, or when working in the same place where they live, as it is the case, for instance, for migrant domestic workers (see A/70/205). Provisions to protect women against discrimination in the workplace, including against sexual harassment, have been included in the laws of some countries (see E/CN.6/2015/3).

22. Workplaces can also be sites, however, where women can find protection from domestic and intimate partner violence, through support, information and referral to services. They can also contribute to preventing violence against women in general by promoting gender equality and by changing social norms that condone or tolerate such violence.

### **Violence against women in political life**

23. Research has suggested that women's inclusion in politics brings issues to the political agenda that favour women's concerns, including reform of discriminatory

<sup>12</sup> Georgia Taylor and others, "Addressing violence against women and girls through DFID's Economic Development and Women's Economic Empowerment Programmes", Department for International Development Guidance Note, part A (February 2015).

<sup>13</sup> Adrienne Cruz and Sabine Klinger, *Gender-based Violence in the World of Work: Overview and Selected Annotated Bibliography*, Working Paper, No. 3 (Geneva, International Labour Organization (ILO), 2011).

<sup>14</sup> European Union Agency for Fundamental Rights, *Violence against Women: An EU-wide Survey — Main Results* (Luxembourg, Publications Office of the European Union, 2014).

partner and domestic violence, violence and sexual harassment in workplaces and public spaces more broadly and violence in political life. These responses will be examined in the areas of laws, prevention, services and responses, and data collection and research.

#### A. Legislation

27. There was considerable progress during the reporting period in addressing intimate partner and domestic violence through the adoption of laws. To date, 127 of 173 countries examined have laws on domestic violence. The importance of laws addressing intimate partner and domestic violence was highlighted in a recent analysis of data collected in 173 countries by the World Bank, which demonstrated that life expectancy for women is higher where they are legally protected from domestic violence.<sup>7</sup>

28. Many reporting Member States have adopted or revised legislation on domestic violence and intimate partner violence (Albania, Argentina, Colombia, China, Italy, Mexico, Morocco, Republic of Korea, Turkey, Sweden and Switzerland), often with the support of the United Nations system. Such laws often have a focus on a special area, such as prevention through educational programmes, as well as on active engagement with the media (China and Turkey). Other laws expanded definitions of domestic violence or the scope of protection by including the notion of femicide (Argentina, Colombia, Mexico and Italy) or by making sanctions against violence against pregnant women or perpetrated in front of the victim's children more severe (Morocco).

29. Morocco addressed loopholes in its legislation by repealing the clause that exempts the prosecution of the rape offenders in the case of subsequent marriage of the victim to the perpetrator. Some States strengthened the application of civil protection orders to better protect survivors in the aftermath of violence (Georgia, Singapore and Sweden).

30. Domestic violence laws often cover physical, sexual and psychological violence, but may exclude economic violence. Economic violence consists of denying a woman's access to and control over basic resources. As such, it deprives women of economic means and complicates women's choices regarding dealing with abusive relationships. States, such as Lebanon and Tonga, addressed economic violence either in new or revised laws (Hungary, Italy and New Zealand). Economic violence remains to be addressed in 94 of the 173 countries.<sup>7</sup>

31. Unequal relations between spouses or partners during a marriage or other union may affect a woman's financial situation and earning capacity, rendering her in a vulnerable situation when attempting to leave an abusive relationship. Comprehensive legislation on violence against women should be accompanied by family law provisions that enable survivors who wish to end violent situations (by either leaving or ejecting the abuser) access to an equal share of marital or relationship property, to gain custody of their children and to receive spousal and child support. During the reporting period, Member States strengthened their legislation to that end. For example, Tunisia withdrew its reservation to article 16 of the Convention on the Elimination of All Forms of Discrimination against Women, on equality in family. Other States regulated the ownership or management of marital property on an equal basis between spouses or partners (Hungary), as well as in

Chile, Croatia and Kenya. In Kiribati, legislation was adopted to provide for financial support to the spouse in financial need in case of divorce.<sup>7</sup>

32. At workplaces, women may face violence and harassment. Member States continued to address violence and sexual harassment in workplaces by adopting new laws or adding specific provisions to existing legislation (Albania, Argentina, Egypt, India, Nepal and Morocco). Belgium strengthened women's protection in workplaces through the provision of civil remedies.<sup>7</sup>

33. Violence perpetrated through information and communication technologies is an increasing concern to many countries, including when it occurs in workplaces. To respond to that challenge, countries expanded the scope of the legislation to include, for example, online harassment. In the Philippines, a new law on sexual harassment includes any act that may be committed, including within or outside the place of employment, and with the use of technology.

34. Addressing sexual harassment in public spaces, including in streets and on public transportation is important to ensure women's mobility and access to workplaces and the exercise of their political rights. During the reporting period, only a few Member States, including Egypt,<sup>7</sup> addressed that form of violence in their laws (Peru and Philippines).

35. Legislation is required to protect women from violence and harassment while exercising their political rights. The Plurinational State of Bolivia has adopted legislation to address that gap, while other countries in the region are considering similar legislation, including Costa Rica, Ecuador, Honduras, Mexico and Peru.<sup>20</sup> In an expert group meeting, held in the Plurinational State of Bolivia in May 2016, several Member States in the region considered a model law to address this type of violence.<sup>7</sup> Other States put in place regulations aimed at preventing violence against women candidates and voters (Nepal).

36. United Nations entities continued to support Member States to adopt or improve laws that address violence against women and girls. In Myanmar, UNODC provided inputs to bring legislation related to violence against women into line with international standards and norms. UN-Women, together with UNODC, conducted a gap analysis of Viet Nam's Penal Code and Criminal Procedure Code, providing research findings and key United Nations joint recommendations for strengthening effective responses to violence against women, including on domestic and intimate partner violence, to the National Assembly. In Mexico, the United Nations Trust Fund to End Violence against Women and Girls (United Nations Trust Fund), an inter-agency United Nations mechanism, administered by UN-Women, supported *Católicas por el Derecho a Decidir* ("Catholics for the Right to Decide"), on the implementation of relevant laws, in compliance with the rulings of the Inter-American Court of Human Rights.

37. Despite progress, there are still persistent challenges in the areas of addressing these forms of violence and their implementation. In a survey of 133 countries on issues concerning violence prevention, only 44 per cent of countries with laws on domestic violence reported that such laws had been fully enforced.<sup>8</sup> There were also 32 countries out of the 173 examined by the World Bank that retain clauses

<sup>20</sup> See Organization of American States, "Second meeting of experts on political violence against women", held in La Paz on 30 and 31 May 2016, available from <http://us7.campaign-archive1.com/?u=f4f9c21ffdd25a4e4ef06e3c2&id=bc70f6b331&e=b876f6c081>.

exempting perpetrators of rape from prosecution when they are married to or subsequently marry the victim.<sup>7</sup>

38. Remaining gaps in laws addressing violence in workplaces are often of limited scope, not covering a wide range of workplaces, including homes, where, for example, domestic workers are located. The assessment of their impact is limited, as data on the prevalence of this aspect of violence remain scarce.<sup>11</sup> In addition, legislation to address sexual harassment in public spaces and violence against women in the political sphere remains very limited.

## **B. Prevention measures**

39. Member States continued to undertake interventions, often with the support of the United Nations system, to address discriminatory societal attitudes and practices that condone violence against women in general, or domestic and intimate partner violence (Argentina, Czech Republic, Mexico, Serbia, Switzerland, Tunisia and Turkey).

40. These interventions often targeted men and boys, including through awareness-raising campaigns, supporting men's organizations and developing special policies aimed at reaching men and boys. (Albania, Azerbaijan, Cambodia, Cuba, Guatemala, Mexico, Morocco, Sweden and Uganda). United Nations entities, including the United Nations Population Fund (UNFPA) and UN-Women, continued to engage men and boys by involving youth, parliamentarians, sports federations and faith-based organizations.

41. Other interventions included the development of policies, awareness-raising campaigns and mobilization of communities (Albania, Argentina, Burkina Faso, Cabo Verde, Colombia, Djibouti, Georgia, Italy, Mexico, Monaco, Republic of Korea, Timor-Leste, Tunisia, Turkey, Sweden, Uganda), also by utilizing a broad range of material, such as television/radio spots and social media (Cambodia, Greece and Morocco). UNICEF, IOM and the Office for the Coordination of Humanitarian Affairs of the United Nations Secretariat, through social media, also improved public awareness of violence against women and girls. UN-Women continued significant global advocacy through the UNiTE campaign of the Secretary-General to end violence against women, and a number of "Orange Day" activities on the occasion of the International Day for the Elimination of Violence against Women. Limited information was provided, however, on innovative interventions to prevent violence through the usage of new technologies and information.

42. A few Member States indicated that they have adopted a comprehensive approach to address the root causes of domestic violence (Australia, Japan and Norway). Evidence shows that such a comprehensive approach that includes multi-component interventions at different levels (society, community, relationship and individual) is necessary to address the multiple factors that increase the risk of violence that women may face. The first ever United Nations system framework on the prevention of intimate partner violence and sexual violence by non-partners also reflects such a comprehensive approach. UN-Women coordinated the development

of the framework, in partnership with ILO, OHCHR, the United Nations Development Programme (UNDP), UNESCO, UNFPA and WHO.<sup>21</sup>

43. The global research programme What Works to Prevent Violence, supported by the Department for International Development (United Kingdom), has been building the evidence on what works to prevent violence against women in general, including intimate partner and domestic violence. Findings show that interventions are effective when they aim to transform gender stereotypes and to change concepts of masculinities, or when they work with both men and women, compared to single-sex interventions. Evidence also indicates that certain interventions can reduce intimate partner violence. These interventions include community mobilization that involves both men and women, boys and girls, reducing intimate partner violence up to 52 per cent,<sup>22</sup> or microfinance programmes when combined with gender training and the engagement of both men and women, reducing such violence up to 50 per cent.<sup>23</sup>

44. The increased access of women to employment and to workplaces, either male-dominated or where stereotyped masculinities prevail, can increase the risk of violence and harassment against them. Despite the crucial role of legislation to address violence against women in the workplace, additional efforts, including through the development of policies and tools, are necessary to support their implementation. To achieve that, Member States produced guidelines and tools to guide private sector employers and workers' unions in developing anti-sexual harassment policies and measures (China, Guatemala, Hungary, Japan and Nepal). Other States, including Viet Nam,<sup>24</sup> developed codes of conduct on sexual harassment in workplaces, and conducted gender audits, including Ireland<sup>25</sup> and the United States of America,<sup>26</sup> to better inform prevention policies and interventions addressing sexual harassment and violence in workplaces.

45. In addition to the implementation of laws, it is essential to change social norms that condone violence against women in workplaces. Training and awareness-raising campaigns conducted in workplaces can be associated with a change in attitudes and increased knowledge about sexual harassment, particularly among men.<sup>11</sup> As a result, growing numbers of employers in several countries have developed training modules on gender equality and the prevention of sexual harassment in the workplace (Australia and Norway), and have organized sensitization campaigns (Finland and Lithuania). While such measures are

<sup>21</sup> UN-Women, "A framework to underpin action to prevent violence against women", 2015, available from [www.unwomen.org/en/digital-library/publications/2015/11/prevention-framework](http://www.unwomen.org/en/digital-library/publications/2015/11/prevention-framework).

<sup>22</sup> Charlotte Watts and others, "The SASA! study: a cluster randomized trial to assess the impact of a violence and HIV-prevention programme in Kampala, Uganda", Impact Evaluation Report, No. 24 (New Delhi, International Initiative for Impact Evaluation, 2015). Available from <http://www.3ieimpact.org/en/evidence/impact-evaluations/details/292/>.

<sup>23</sup> Diana J. Arango and others, "Interventions to prevent or reduce violence against women and girls: a systematic review of reviews, Women's Voice and Agency Research Series, No. 10 (World Bank, 2014).

<sup>24</sup> Viet Nam, Ministry of Labour and others, *Code of Conduct on Sexual Harassment in the Workplace*, (Hanoi, 2014).

<sup>25</sup> Irish Human Rights and Equality Commission, "Code of practice on sexual harassment and harassment at work" (2015).

<sup>26</sup> Donna Chung, Carole Zufferey and Anastasia Powell, *Preventing Violence against Women in the Workplace: An Evidence Review — Full Report* (Melbourne, Australia, Victorian Health Promotion Foundation, 2012).

promising, there is limited evidence on what works to address violence against women in the workplace, as few evaluations of interventions have been conducted.

46. States increasingly recognize the important role of workplaces in preventing violence against women in general. As such, in Australia workplace managers have increasingly adopted relevant measures, including awareness-raising and training of staff on gender equality and respectful relationships.

47. Recognizing that violence against women in political life constitutes one of the most serious obstacles to the realization of women's political rights, Member States and other actors, including political parties, civil society actors and United Nations entities, have developed measures to prevent such violence.

48. In several African countries, civil society groups and activists have aimed to reduce violence in electoral periods through monitoring, mediation and public awareness. The Women's Situation Room aims to raise awareness of, monitor and respond to violence during elections by engaging all stakeholders in constructive dialogue and peace advocacy. The Women's Situation Room model has been implemented with the support of UNDP and UN-Women in several States, including Guinea Bissau, Kenya, Nigeria and Uganda.

49. Initiatives were undertaken during the reporting period, with the support of United Nations entities, with the objective of raising awareness about the extent of violence that women face when exercising their political rights. UNDP and UN-Women particularly supported activities targeting electoral management bodies and focusing on legislators, parliamentary networks and political parties in Fiji, Kenya, Papua New Guinea, Samoa, Solomon Islands, South Sudan and Vanuatu. Other programmes receiving technical support from UNDP and UN-Women aimed at raising awareness on women's electoral and political rights targeted at women leaders, candidates and aspirants in the Plurinational State of Bolivia and Libya, and the general public, particularly women voters, in several African countries, including Burundi, Mali and Zimbabwe.

50. Member States are gradually taking action to prevent violence and harassment against women, particularly in urban spaces, as a significant barrier to women's mobility to exercise their economic and political rights. To improve women's economic independence in Papua New Guinea, through their access to markets as vendors, UN-Women supported the improvement of infrastructures and the development of systems to prevent violence against women, including through innovative cashless methods for collection of fees that prevent extortion and theft.

51. Recognizing that each city is unique and that it requires a response adapted to the local context, several States, including India, Mexico and the Philippines, also supported by UN-Women's Safe Cities and Safe Public Spaces Programme, conducted diagnostic studies, by involving women and other community members, to collect quantitative and qualitative data in order to better inform policies and interventions. In Egypt and India, with support from UN-Women, the women's safety audits, namely, the assessments of public spaces, by and for women, have been promising in supporting decision-making with practical solutions and approaches that can make urban spaces safer for women.

52. Participatory diagnostic studies show that urban planning can improve public safety for women. Member States, such as Ecuador and Egypt, with support from

UN-Women, Central African Republic, supported by IOM, and France,<sup>27</sup> took action to improve their urban planning, including lighting, and transportation infrastructure. Other States increased capacity at the local level, either through the training of municipal and public transportation staff (Rwanda) or by sensitizing police forces and hiring more women police officers (Albania and Azerbaijan).

### C. Support services and responses

53. The majority of Member States reported on the provision of services and responses to victims/survivors of domestic and intimate partner violence, some of which were prompted by the high rates of such violence associated with gender-related killings or femicide (Italy and Norway). Many referred to the provision of 24-hour hotlines, referral mechanisms, shelters, psychosocial counselling, legal aid, specialized courts and justice services, and specialized case management processes (Albania, Australia, Hungary, Lithuania, New Zealand, Norway, Serbia, Singapore and Timor-Leste).

54. Countries are also increasingly using technology to promote the availability of services. Brazil, for example, supported by UN-Women, recently developed an online application for mobile phones to provide women with information on violence, legislation and available services, but also to identify unsafe areas of the city and to rate the quality of services provision.

55. The quality of services has also received attention. Global data shows that only 40 per cent of women who experience violence seek help, mainly from friends and family. Of the 40 per cent seeking assistance, only 10 per cent seek assistance from police.<sup>28</sup> Reasons include lack of trust in the quality of services being provided, as well as the capacity of service providers. To respond to that challenge, and in line with good practice, Cambodia focused on improving the quality of services through the development and implementation of minimum standards in key areas of services provision for victims/survivors of domestic violence and other forms of violence.

56. Efforts to improve the quality of services and service provision to survivors were also supported by the United Nations system. For example, a partnership between UN-Women, UNFPA, WHO, UNDP and UNODC led to the development of the Essential Services Package. The package provides guidelines for the provision of services to women experiencing violence, particularly domestic and intimate partner violence and non-partner sexual violence, in different sectors.<sup>29</sup> Full use of the package can be considered good practice for service delivery. The United Nations Trust Fund supported the Grassroot Soccer programme in Cape Town, South Africa, which uses sports to foster girls' empowerment, supports their

<sup>27</sup> France, Ministry of the Interior, *Sécurité des femmes dans les transports en commun: plan national de lutte contre le harcèlement sexiste et les violences sexuelles* (2015). Available from [www.gouvernement.fr/sites/default/files/action/piece-jointe/2015/07/plan-national-de-lutte-contre-le-harcèlement-sexiste-et-les-violences-sexuelles-dans-les-transports-en-commun.pdf](http://www.gouvernement.fr/sites/default/files/action/piece-jointe/2015/07/plan-national-de-lutte-contre-le-harcèlement-sexiste-et-les-violences-sexuelles-dans-les-transports-en-commun.pdf).

<sup>28</sup> *The World's Women 2015: Trends and Statistics* (United Nations publication, Sales No. E.15.XVII.8).

<sup>29</sup> UN-Women and others, "Essential services package for women and girls subject to violence" (2015), available from [www.unwomen.org/en/digital-library/publications/2015/12/essential-services-package-for-women-and-girls-subject-to-violence](http://www.unwomen.org/en/digital-library/publications/2015/12/essential-services-package-for-women-and-girls-subject-to-violence).

awareness of sexual and reproductive health and increases their access to medical, legal and psychosocial services. In 2014 and 2015, the Trust Fund reached some 1,233 girls in 8 schools. It also supported the NGO Najoti kudakon in Tajikistan, which has created six women's support groups, where women provide support to women who experience domestic violence.

57. Long-term assistance is necessary to ensure the full recovery of women in the aftermath of violence, as well as to reduce the risks of re-victimization. Such assistance includes access to economic resources and employment opportunities, access to long-term housing and reintegration into society. While some States referred to training and skills-building programmes for victims/survivors (Albania, Argentina, Burkina Faso, Mexico and Tunisia), including with support from UNIDO, a limited number of Member States identified specific interventions concerning long-term support for survivors of domestic violence. The lack of such long-term support to survivors of intimate partner and domestic violence renders women more vulnerable to future violence and remains a critical gap for all countries.

58. Responses taken by workplaces to respond not only to violence that takes place in the workplace, but also to violence that women may experience in their personal lives, particularly domestic and intimate partner violence, are critical. They not only assist individual women in seeking necessary support and assistance, where they may not have any other opportunity to do so, they also increase productivity in the workplace and reduce potential economic costs from absences owing to violence.

59. Good practices in responses to violence and harassment against women include clearly defined policies and immediate responses to such violence. Such responses may include procedures to ensure filing of complaints, as well as the monitoring and investigation of cases of harassment and violence. They should also include the referral of victims to support services and the recording of facts and figures to ensure that relevant policies are in place and implemented.<sup>30</sup> Some countries, such as Nepal, have introduced such measures to respond to sexual harassment in the workplace through the development of mechanisms for women to report allegations of such harassment.

60. In addition to responses to sexual harassment and other forms of violence occurring in the workplace, many workplaces also respond to women experiencing domestic and intimate partner violence. One study noted that such responses may include supporting individual staff and managers to recognize signs that an employee might be experiencing violence from a partner; responding appropriately to a disclosure of violence; and referring such employees to an appropriate service and/or to report their experience.<sup>31</sup>

61. The provision of paid leave for survivors of domestic violence and the development of toolkits and other resources on effective responses for application in the workplace to respond to domestic violence are also promising measures

<sup>30</sup> European Public Service Union, "European social dialogue: multi-sectoral guidelines to tackle third-party violence and harassment related to work", 2010, available from [www.epsu.org/article/multi-sectoral-guidelines-tackle-third-party-violence-and-harassment-related-work](http://www.epsu.org/article/multi-sectoral-guidelines-tackle-third-party-violence-and-harassment-related-work).

<sup>31</sup> Anastasia Powell, Larissa Sandy and Jessica Findling, "Promising practices in workplace and organizational approaches for the prevention of violence against women" (Royal Melbourne Institute of Technology University, 2015).

(Australia and New Zealand). Funded by the United States Department of Justice Office on Violence against Women, a number of organizations in the United States have created a "one stop" online resource that provides comprehensive advice and tools for responding to domestic and sexual violence in the workplace.<sup>32</sup> Other initiatives in Ireland<sup>25</sup> and the United States<sup>26</sup> include staff surveys, which contribute to assist employers in identifying and referring victims/survivors of violence, particularly women and girls, but also as an effective tool to measure programme success and to inform future interventions.

62. While the majority of the interventions on sexual harassment by Member States focus on the workplace, interventions targeting such harassment in public spaces are increasing. For example, in France, the Government recently unveiled measures to curb sexual harassment on public transportation following a poll in which 100 per cent of women surveyed said they had been confronted with the problem. Measures include introducing an emergency telephone number to report harassment and the creation of an online application to locate areas where incidents of violence occur.<sup>7</sup>

#### D. Data collection and research

63. Understanding the extent, the nature and the consequences of violence against women is important in order to inform legislation, policies and programmes. In order to achieve that, Member States continue to collect data and compile statistics relating to the prevalence of different forms of violence against women, especially domestic and intimate partner violence, either through prevalence surveys (Cambodia, Italy, Mexico, Norway, Peru and Turkey), or through administrative records and management information systems from those services most used by women survivors of violence. Although most Member States reported on administrative data from such services, in many countries these data were often not disaggregated by sex and did not record the relationship between the survivor and the perpetrator.

64. Currently, more than 100 countries have conducted at least one prevalence survey on violence against women, including domestic or intimate partner violence. More than 40 countries have conducted at least two surveys in the period between 1995 and 2014, which means that, depending on the comparability of the surveys, trends and changes over time could begin to be analysed.<sup>28</sup>

65. The availability of prevalence data on violence against women, however, still remains uneven across and within countries. Many countries still do not have data on domestic or intimate partner violence, while quality, reliability and comparability of the data across and within countries remain a challenge for those countries with available data (see E/2016/75). To address that challenge, United Nations entities have developed methodological tools and guidance to support the collection of data on violence against women, such as the *Guidelines for Producing Statistics on Violence against Women: Statistical Surveys*.<sup>33</sup>

66. Member States are increasingly dedicating efforts to improve understanding of forms of violence for which evidence is still scarce, such as violence in workplaces, as well as sexual harassment and violence in political life. Since 2006, the National

<sup>32</sup> See [www.workplacesrespond.org/](http://www.workplacesrespond.org/).

<sup>33</sup> *Guidelines for Producing Statistics on Violence against Women: Statistical Surveys* (United Nations publication, Sales No. E.13.XVII.7).

Survey on the Dynamics of Household Relationship in Mexico, for example, has collected data not only on domestic and intimate partner violence, but also on sexual harassment at work and school and in social groups. That has helped make visible other forms and expressions of violence beyond that occurring in the private sphere, and confirms that violence against women occurs not only at home but in all social spaces.<sup>34</sup>

67. Member States also report research on various themes concerning violence against women, such as the effectiveness of measures implemented to prevent and redress domestic or intimate partner violence, as well as gender-based cyber-violence (Armenia, Finland, Republic of Korea, Sri Lanka and Turkey).

68. UN-Women serves as the secretariat of the Global Database on Violence against Women, which was launched in March 2016. The database, formerly the United Nations Secretary-General's database on violence against women, provides easy access to comprehensive and up-to-date information on the prevalence of violence against women and measures undertaken by Member States to address all forms of violence against women in the areas of laws and policies, prevention, services, data collection and research.

69. The 2030 Agenda for Sustainable Development and the global indicator framework for the Sustainable Development Goals, developed by the Inter-Agency and Expert Group on SDG Indicators, provide a valuable platform to increase the availability of data on several forms of violence against women and girls, including domestic and intimate partner violence. They can also improve the quality, the reliability and the comparability of such data across countries.

70. This framework includes two indicators on the prevalence of physical, sexual and psychological violence by an intimate partner, as well as of sexual violence by persons other than an intimate partner, in the previous 12 months to monitor progress of the specific target to eliminate all forms of violence against all women and girls (target 5.2). Other indicators related to violence against women and girls, that is, prevalence of physical and sexual harassment by sex and place of occurrence (target 11.7) and number of victims of intentional homicide by sex (target 16.1), are also part of the framework, and will allow assessment of other violence, including in public spaces.

71. The framework also includes indicators on women's participation in political, economic and public life, as well as their rights to economic resources. It includes an indicator on average hourly earnings of female and male employees, as well as an indicator on legal frameworks to promote, enforce and monitor equality and non-discrimination on the basis of sex.

<sup>34</sup> Irene Casique Rodríguez, "Production of national statistics on violence against women: data sources, challenges and lessons learned", paper presented for the interactive expert panel on the review theme: addressing data gaps and methodology issues at the sixtieth session of the Commission on the Status of Women, New York, March 2016. Available from [www2.unwomen.org/-/media/headquarters/attachments/sections/csw/60/meetings/csw60-expert\\_panel-irene%20caciques-paper.pdf?v=1&d=20160415T170814](http://www2.unwomen.org/-/media/headquarters/attachments/sections/csw/60/meetings/csw60-expert_panel-irene%20caciques-paper.pdf?v=1&d=20160415T170814); National Institute of Statistics and Geography and others, "Mexico national survey on the dynamics of household relationships 2006", available from <http://ghdx.healthdata.org/record/mexico-national-survey-dynamics-household-relationships-2006>.

72. It is expected that countries will increasingly report on these indicators in accordance with agreed international standards and that, when these standards do not exist, as, for example, in the case of physical and sexual harassment, these will be developed to provide guidance to countries.

73. The implementation of the proposed Sustainable Development Goals indicators framework will require, however, appropriate interventions to strengthen national statistical capacities (see E/2016/24-E/CN.3/2016/34).

74. The availability of these data, upon the requirement that Member States will report on it, will allow for analysis of the relation between different manifestations of gender inequality, such as domestic and intimate partner violence, violence in public spaces, women's economic empowerment and women's political participation. The data will help understand the violence experienced by women and girls in a more comprehensive way and develop strategies and policies that address all forms of violence experienced by women and girls in a more effective manner.

## **V. Conclusions and recommendations**

### **A. Conclusions**

75. Despite decades of work to address violence against women, it remains persistent and ubiquitous. The tenacity of this expression of gender inequality is not to be underestimated. Understanding of such abuse has grown, initiatives to reduce it have been tried and intolerance of violence is building globally. The commitments in the new sustainable development agenda confirm that. However, in order to fulfil the promise made to women that violence will be eliminated by 2030, a step change in our collective efforts is required. For violence against women to become a relic of history, the following gaps and actions need to be prioritized.

76. Violence against women and girls is a complex phenomenon and cannot be attributed to only one factor. Multi-sectoral interventions are often missing to prevent and respond to such violence while collaboration and coordination between multiple stakeholders and different sectors within the Government is not always effective. There is growing evidence and knowledge on the inter-linkages between violence against women and their political and economic empowerment, but further research and analysis are required to fully understand causality, impacts and consequences.

77. Many actions have been taken by States to address violence against women, including domestic and intimate partner violence, in the areas of laws, prevention, services and responses, data collection and research. Limited information was provided, however, about the impact and the sustainability of these interventions.

78. Despite the increasing number of laws addressing intimate partner and domestic violence, there are still significant gaps in the forms of violence being addressed, such as economic violence, and violence that takes place in public spaces and the political sphere. In addition, significant gaps remain in other relevant areas of law, such as family law. The greatest challenge remains, however, the lack of the implementation of laws.

79. While the range of prevention initiatives is expanding beyond awareness-raising, a more comprehensive approach is still required, while more focus needs to be placed on the prevention of violence in particular contexts and spaces, including in public spaces, and in relation to women's political participation. More research is needed on innovative approaches to prevent such violence through information and new technologies.

80. Responses to violence against women in the workplace are an important part of comprehensive responses to such violence, both to ensure women's safety and their ongoing access to employment and empowerment. Increasingly, workplaces are not only responding to violence that takes place on their premises, but also to violence that takes place in women's personal lives, particularly domestic and intimate partner violence.

81. Despite efforts of Member States, services and responses to domestic and intimate partner violence remain focused on the immediate aftermath of violence. Long-term support, critical to survivors' recovery and full participation in society, as well as the prevention of future violence, remains a critical gap in nearly all countries.

82. Significant gaps remain in the collection of data on the prevalence of violence against women that are internationally consistent and comparable, particularly in the areas of violence and sexual harassment against women in public spaces and in political life. Improvements in this area are critical for monitoring progress on the Sustainable Development Goals and targets on violence against women. Administrative data collection remains a gap for all countries.

## **B. Recommendations**

83. States should strengthen the collaboration among different sectors of the Government to prevent and respond to violence against women and girls and increase investments in this area.

84. States should continue the collaboration with multiple stakeholders, including United Nations entities and civil society, including youth and faith-based organizations. States and the United Nations entities should support building strong and independent women's organizations, including through consistent funding.

85. States, the United Nations entities and researchers should continue research and analysis on the impact of women's economic, social and political empowerment on violence against women.

86. States should include all forms of intimate partner violence in their legislation, including physical, sexual, psychological and economic violence. Such legislation should be complemented with legislation that ensures equality between partners or spouses within marriage or intimate relationship. Member States should continue adopting laws to address violence against women in political life, as well as in public spaces and workplaces, by ensuring that workplaces are understood as including domestic spaces as well.

87. States should place greater emphasis on providing long-term support and assistance to survivors of violence to ensure their full recovery and to support their full participation in all aspects of the society, including political and economic life.

88. States, in collaboration with employers' and workers' associations, should strengthen their efforts to prevent and respond to violence against women, which occurs not only at workplaces, but also in women's personal lives. They should ensure that appropriate tools, such as anti-harassment policies and codes of conduct, as well reporting and investigation mechanisms, are in place to ensure women's safety and perpetrators' accountability. They should ensure that workplace cultures are based on gender equality and respectful relationships.

89. States, in collaboration with political parties, civil society, United Nations entities and other organizations, should enhance their efforts to prevent violence against women in political life, including through awareness-raising and advocacy, and monitoring, including through fact-based assessments and data collection, which can contribute to establishing the necessary evidence base to promote prevention of such violence and hold perpetrators accountable.

90. Relevant departments of Governments, such as national statistical offices, together with United Nations entities and other stakeholders, should work together to ensure that national capacities are built and sustained to implement violence against women national prevalence surveys in alignment with international global standards and with the Sustainable Development Goals monitoring and reporting requirements.

91. States, together with the United Nations system and other relevant stakeholders, should also consider the development of methodologies to collect data on other forms of violence against women, such as violence occurring in public spaces, including in political life.

92. Efforts should be made by States to improve the administrative and management information systems of those services for survivors of violence and ensure that, at a minimum, data are disaggregated by sex and relationship between the survivor and perpetrator, and that the data are collected, stored and used in a confidential and ethical manner.

**General Assembly**Distr.: General  
27 July 2016

Original: English

**Seventy-first session**

Item 19 (i) of the provisional agenda\*

**Sustainable development: promotion of new and renewable  
sources of energy****Promotion of new and renewable sources of energy****Report of the Secretary-General***Summary*

New and renewable sources of energy are perceived not only as an important and valuable option for energy supply, but also as key resources for addressing global challenges, including universal energy access, energy security, climate change, and ultimately poverty eradication and sustainable development. For the first time in human history, there have been two straight years of decoupling between emissions and gross domestic product growth, a development in which renewable energy has played an important part. Continuing technological advances, rapidly falling costs and successful deployment and use of renewable energy systems in many developed and developing countries have demonstrated their potential to satisfy energy requirements and to replace other energy sources. As renewable energy markets and industries mature, new opportunities arise, but at the same time different challenges and uncertainties appear. Newly installed renewable energy capacity has reached new record levels as investment has strongly rebounded. In addition, various renewable energy technologies have reached historic cost-competitiveness, thus putting them on a par with conventional power generation. Nevertheless, uncertainty over the future of renewable sources of energy remains as oil and natural gas prices have plummeted over the past year. The year 2015 ended with two crucial initiatives in support of the promotion of renewable energy: the adoption of the 2030 Agenda for Sustainable Development, including a stand-alone goal on energy, and the adoption of the Paris Agreement by the Conference of the Parties to the United Nations Framework Convention on Climate Change.

\* A/71/150.



## Contents

|                                                                                       | <i>Page</i> |
|---------------------------------------------------------------------------------------|-------------|
| I. Introduction .....                                                                 | 3           |
| II. Overview of new and renewable sources of energy .....                             | 4           |
| A. Status .....                                                                       | 4           |
| B. Costs .....                                                                        | 7           |
| Employment .....                                                                      | 9           |
| Other factors affecting renewable energy growth .....                                 | 11          |
| C. Investments .....                                                                  | 12          |
| III. Promotion of new and renewable sources of energy .....                           | 14          |
| A. Sustainable Development Goal 7 and the Sustainable Energy for All initiative ..... | 14          |
| B. National efforts .....                                                             | 15          |
| C. International institutional efforts .....                                          | 17          |
| D. International financial institutions .....                                         | 20          |
| IV. Conclusions .....                                                                 | 21          |

## I. Introduction

1. In recent years, the importance of promoting new and renewable sources of energy has been reaffirmed at the United Nations. The Secretary-General's Sustainable Energy for All (SE4ALL) initiative, founded in 2011, has three energy objectives, one of which is to double the share of renewable energy in the global energy mix. This was followed, in June 2014, by the General Assembly unanimously declaring 2014-2024 as the Decade of Sustainable Energy for All. That initiative has brought together top-level leadership from all sectors of society — governments, the private sector and civil society — and sparked significant commitments to action that strongly support the increased use of new and renewable energy sources.

2. One outcome of the SE4ALL initiative is the development of the Global Tracking Framework, headed by the World Bank, the International Energy Agency (IEA) and the Energy Sector Management Assistance Programme (ESMAP). This multi-agency partnership effort has established baseline energy data and provides regular biannual updates on trends in energy access, renewable energy and energy efficiency.

3. Energy was also central to discussions during the negotiations on the post-2015 development agenda that culminated with the adoption of resolution 70/1, the 2030 Agenda for Sustainable Development, by the General Assembly on 25 September 2015, as a direct outcome of the United Nations Conference on Sustainable Development (Rio+20) in 2012. The 2030 Agenda contains 17 Sustainable Development Goals and 169 targets. Goal 7 aims to "Ensure access to affordable, reliable, sustainable and modern energy for all". Three corresponding targets stipulate that by 2030 universal access to affordable, reliable and modern energy services be ensured, the share of renewable energy in the global energy mix be increased substantially, and the global rate of improvement in energy efficiency be doubled. The targets are supplemented by two specific targets on means of implementation.

4. Then, in December 2015, the Parties to the United Nations Framework Convention on Climate Change reached a landmark agreement, charting a fundamentally new course for global climate efforts. The Parties reaffirmed their commitment to limiting temperature increase to well below 2 degrees Celsius, while pursuing efforts to limit the increase to 1.5 degrees. The agreement also established binding commitments by all parties to make "nationally determined contributions" and to pursue domestic measures aimed at achieving them. New and strengthened initiatives also came from non-State actors, including cities, States and regions, companies and investors. The founder of Microsoft, Bill Gates, and 27 other major investors in 10 countries launched the Breakthrough Energy Coalition to steer more private capital into clean energy deployment. Additionally, the Compact of Mayors declared that the collective commitment of more than 360 cities was on track to deliver half of the world's potential urban greenhouse gas emissions (GHG) reductions by 2020.

5. In its resolution 69/225 of 19 December 2014, the General Assembly called upon Governments, as well as relevant international and regional organizations and other relevant stakeholders, to combine, as appropriate, the increased use of new and renewable energy resources, more efficient use of energy, greater reliance on

advanced energy technologies, including cleaner fossil fuel technologies, and the sustainable use of traditional energy resources, which could meet the growing need for energy services in the longer term to achieve sustainable development.

6. In the same resolution, the General Assembly requested the Secretary-General to submit to it at its seventy-first session a report on the promotion of new and renewable sources of energy. The present report is submitted pursuant to that request.

## II. Overview of new and renewable sources of energy

### A. Status

7. The role of renewable energy in global energy supply continues to increase in both developing and developed countries. New and renewable sources of energy have become accepted not only as feasible and important energy supply options, but also as key resources for addressing global challenges, including universal energy access, energy security, climate change, and ultimately poverty eradication and sustainable development.

8. There are signs now that global economic growth is starting to decouple from energy-related emissions. For the second year in a row, the global economy grew, by around 2.4 per cent, in 2015, while CO<sub>2</sub> emissions from the energy sector stayed flat.<sup>1</sup> IEA pointed to a surge in renewables as a key factor, noting that they accounted for 90 per cent of new electricity generation in 2015.<sup>2</sup>

9. Nevertheless, major challenging economic and technological factors are still affecting the large-scale deployment of renewable energy. They include the need to further: (a) reduce costs through promotion, technological improvements and scale-up; (b) create a flexible investment environment in many countries; (c) integrate renewable energy technologies into energy systems; (d) enhance research and development; and (e) ensure the sustainability of renewable energy technologies.<sup>3</sup>

10. Figure 1 shows fuel shares in global final energy consumption in 2014. The total share of renewable energy reached 19.2 per cent, up from 18 per cent in 2010, and growth in capacity and generation continued in 2015.<sup>4</sup> That refers to all forms of consumption, including transport, heating, cooling, cooking and power generation. Traditional biomass accounts for 8.9 per cent of current renewable energy consumption. Modern renewable energy sources make up only 10.3 per cent of total consumption. That includes 4.2 per cent from sustainable biomass, geothermal and solar for heating purposes, 3.9 per cent from hydropower, 1.4 per cent from wind, solar and geothermal for power generation, and 0.8 per cent from biofuels for transport.

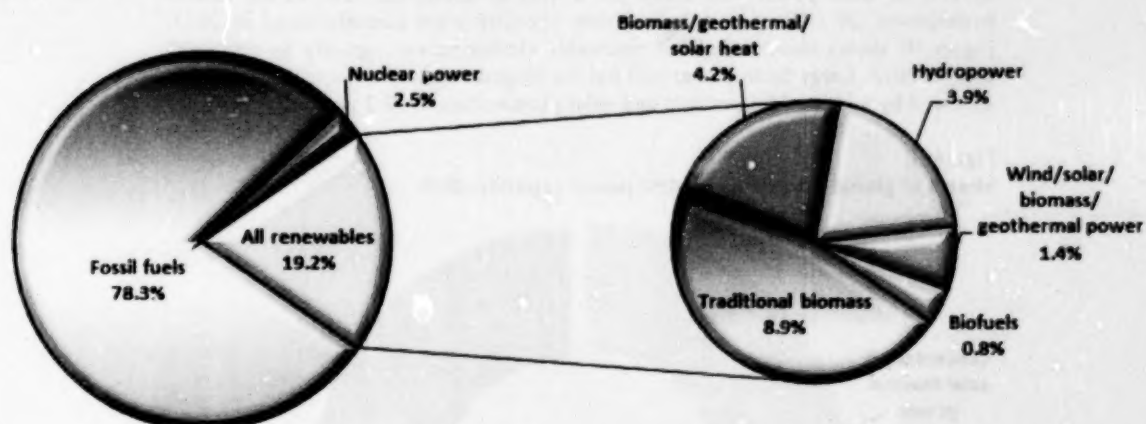
<sup>1</sup> World Bank Group, *Global Economic Prospects, January 2016: Spillovers amid Weak Growth* (Washington, D.C., 2016).

<sup>2</sup> International Energy Agency, Press Release, "Decoupling of global emissions and economic growth confirmed" (Paris, 2016).

<sup>3</sup> International Institute for Applied Systems Analysis, *Global Energy Assessment: Toward a Sustainable Future* (Cambridge, Cambridge University Press, 2012), and the International Institute for Applied Systems Analysis, Laxenburg, Austria.

<sup>4</sup> Renewable Energy Policy Network for the 21st Century (REN21), *Renewables 2016: Global Status Report* (Paris, 2016).

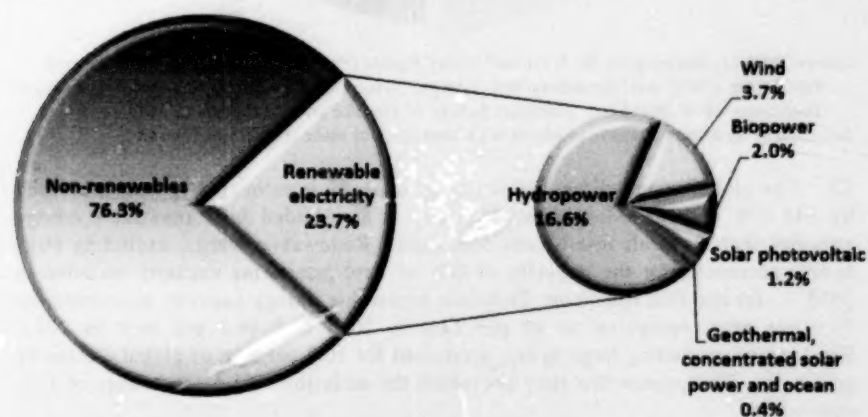
Figure I  
Fuel shares in global final energy consumption, 2014



Source: Renewable Energy Policy Network for the 21st Century (REN21), *Renewables 2016: Global Status Report* (Paris, 2016).

11. Figure II shows fuel shares in global electricity generation for the end of 2015. The share of renewables in overall global electricity generation rose to 23.7 per cent from 20 per cent in 2011. Hydropower has the largest share at 16.6 per cent, followed by wind, biofuels and solar photovoltaic, respectively. Electricity generated globally by renewable energy sources other than hydropower represents only 7.3 per cent.

Figure II  
Fuel shares in global electricity generation for the end of 2015

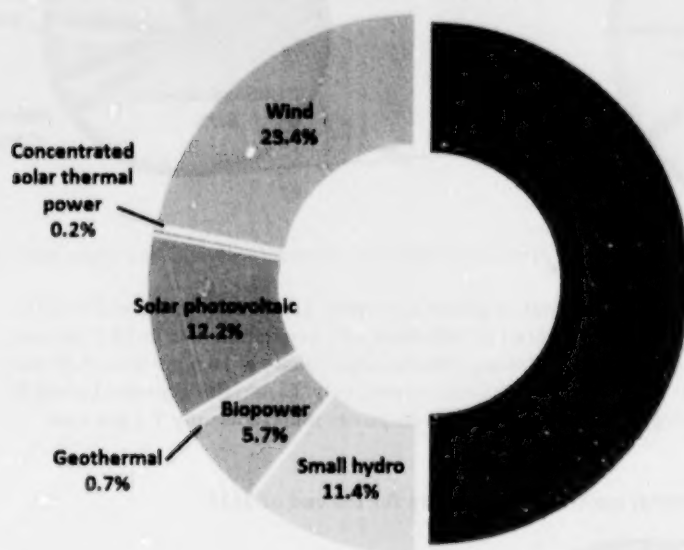


Source: REN21, *Renewables 2016: Global Status Report* (Paris, REN21 Secretariat, 2016).

12. In terms of electric power capacity, the overall global renewable electric power capacity increased to 1,849 gigawatts (GW) in 2015, from 1,701 GW in 2014, the largest annual increase ever. The overall increase in 2015 is the result of market advancements for all renewable energy technologies, but especially for solar

photovoltaic and wind. The solar photovoltaic market was up 25 per cent over 2014 to a record 50 GW, lifting the global total to 227 GW, whereas globally, a record of 63 GW of wind power was added for a total of about 433 GW. In the case of hydropower, 28 GW of new hydropower capacity were commissioned in 2015.<sup>5</sup> Figure III shows shares of global renewable electric power capacity by renewable source, 2015. Large hydropower still has the largest capacity share at 53.6 per cent, followed by wind at 23.4 per cent and solar photovoltaic at 12.2 per cent.<sup>6</sup>

Figure III  
Shares of global renewable electric power capacity, 2015



Source: REN21, *Renewables 2016: Global Status Report* (Paris, 2016). Large hydro data were taken from UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2016* (Frankfurt, Frankfurt School of Finance and Management, 2016).

Note: Large hydropower refers to plants with capacities of more than 50 megawatts.

13. The global installed renewable energy capacity is estimated to have increased by 148 GW in 2015. More power capacity is now added from renewable energy annually than from all fossil fuels combined.<sup>5</sup> Renewable energy, excluding large hydro, accounted for the majority of GW of new generating capacity installed in 2015 — for the first time ever. This new renewable energy capacity accounted for 53.6 per cent, compared to 49 per cent in 2014 and 40.2 per cent in 2013. Renewables, excluding large hydro, accounted for 10.3 per cent of global electricity generation. This means that they prevented the emission of 1.5 gigatonnes of CO<sub>2</sub> equivalent.<sup>7</sup>

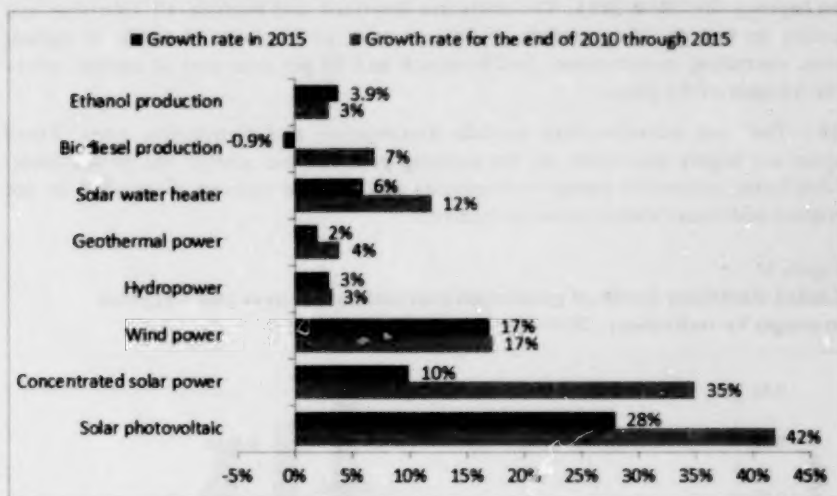
<sup>5</sup> REN21, *Renewables 2016: Global Status Report* (Paris, 2016).

<sup>6</sup> Large hydropower in the present report refers to hydropower plants with capacities of more than 50 megawatts.

<sup>7</sup> UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2016* (Frankfurt, Frankfurt School of Finance and Management, 2016).

14. Figure IV shows the annual growth rates of renewable energy capacity and biofuel production for the five-year period 2010-2015 and for the year 2015.

Figure IV  
Average annual growth rates of renewable energy capacity and biofuel production, 2010-2015 and 2015



Source: REN21, *Renewables 2016: Global Status Report* (Paris, 2016).

15. Solar photovoltaic and concentrated solar power experienced the highest growth rates during the period 2010-2015 at an average of 42 per cent and 35 per cent, respectively. However, compared to the last five-year average, capacity growth in 2015 significantly slowed down for solar photovoltaic, concentrated solar power, solar water heating and biodiesel, with the latter experiencing a negative growth. In terms of installed capacity, including hydro, China led the world in total renewable energy capacity at the end of 2015, followed by the United States of America, Brazil and Germany. In per capita terms, excluding hydropower, the world leader is Denmark, followed by Germany, Sweden and Spain.<sup>5</sup>

16. For the first time in history, total investment in renewable power and fuels in developing countries in 2015 exceeded that in developed economies. The developing world committed a total of \$156 billion, up 19 per cent compared to 2014. China played a dominant role, increasing its investment by 17 per cent to \$102.9 billion, accounting for 36 per cent of the global total. Renewable energy investment also increased significantly in India, South Africa, Mexico and Chile. Other developing countries investing more than \$500 million in renewables in 2015 included Morocco, Uruguay, the Philippines, Pakistan and Honduras.<sup>5</sup>

## B. Costs

17. Renewable energy technologies today are more cost-competitive than ever before, as technology and installation costs of a range of renewable energy

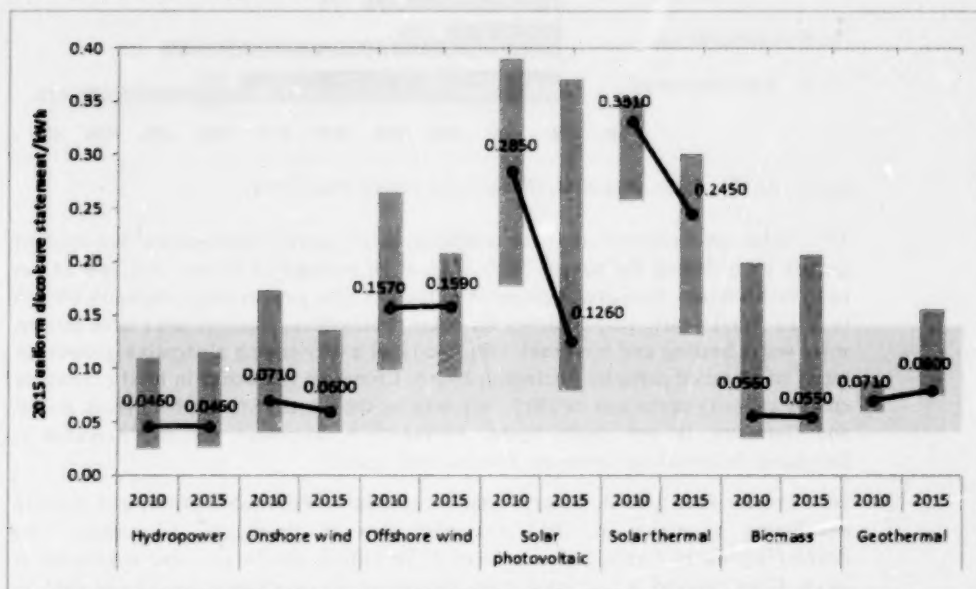
technologies have continued to fall in 2015 and 2016. The cost of renewable energy generation does not only depend on the technology employed, but also on the plant's capacity, location and surrounding infrastructure. The cost-effectiveness of renewable energy technologies in different areas also depends on the availability and quality of the respective resource.

18. Figure V presents estimated ranges for electricity generation costs by technology for 2010-2015. The costs are levelized and exclude all subsidies and policy incentives. They include equipment cost, performance, balance of system cost, operation, maintenance, fuel/feedstock and 10 per cent cost of capital across the lifespan of the plant.

19. The cost estimates also exclude transmission and distribution costs. These costs are highly dependent on the existing grid and the size of the power plant. Distributed renewable energy technologies and off-grid systems most often do not require additional transmission investments.

Figure V

**Global electricity levelized generation cost estimate ranges and weighted averages by technology, 2010-2015**



Source: International Renewable Energy Agency (IRENA) database, "Trends in Global Renewable Energy Levelised Cost of Electricity 2010-2015 (Ranges and Weighted Averages)", Chart (Abu Dhabi, 2015).

Note: The electricity cost estimates include 10 per cent capital cost.

20. Renewable energy today represents one of the most cost-effective solutions for off-grid areas and has a cost advantage over diesel-fired power generation. Given that more than one billion people worldwide lack access to electricity and many of them live in isolated rural areas, which are unlikely to be connected cost-effectively

or promptly to the grid, stand-alone (off-grid) renewable energy solutions constitute one the most promising solutions for these areas.

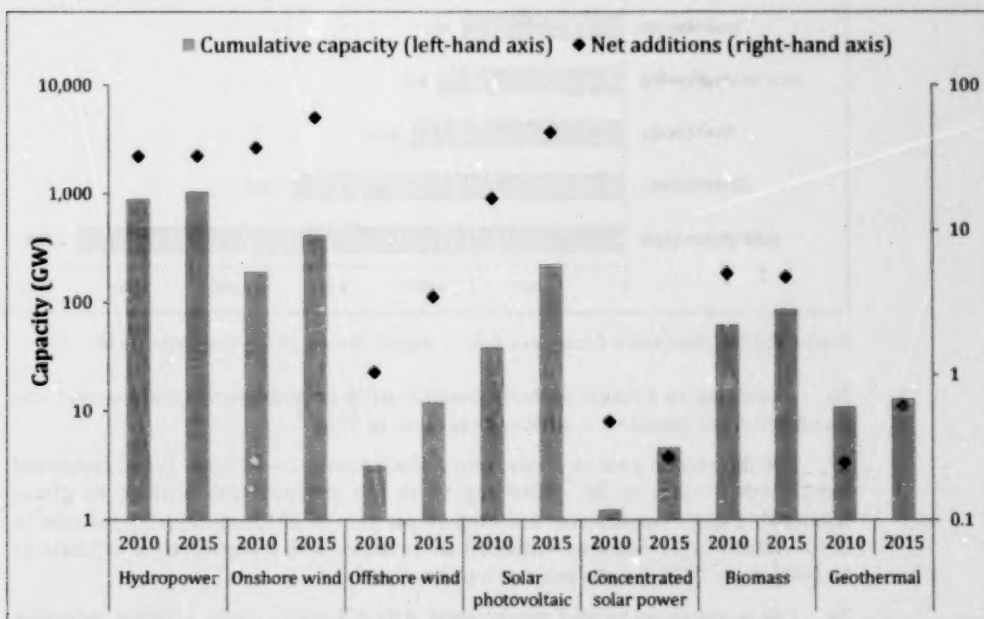
21. The competitiveness of renewable power generation technologies has reached historic levels; onshore wind power, solar photovoltaic and concentrated solar power installed costs have continued to fall as their performance has improved, significantly lowering the cost of electricity from these sources.

22. Onshore wind today is one of the most cost-competitive sources of electricity generation, and its levelized cost of electricity is in the same range or even lower than that of fossil fuels. The best wind projects around the world now consistently deliver electricity at \$0.06 per kWh without financial support.

23. Figure VI shows that wind and solar photovoltaic have offset the stagnation of the net capacity additions in other renewables.

Figure VI

**Renewable capacity: cumulative capacity and net additions, 2010-2015**



Source: IRENA, *Installed Renewable Energy Power Capacity* (Abu Dhabi, 2016).

### Employment

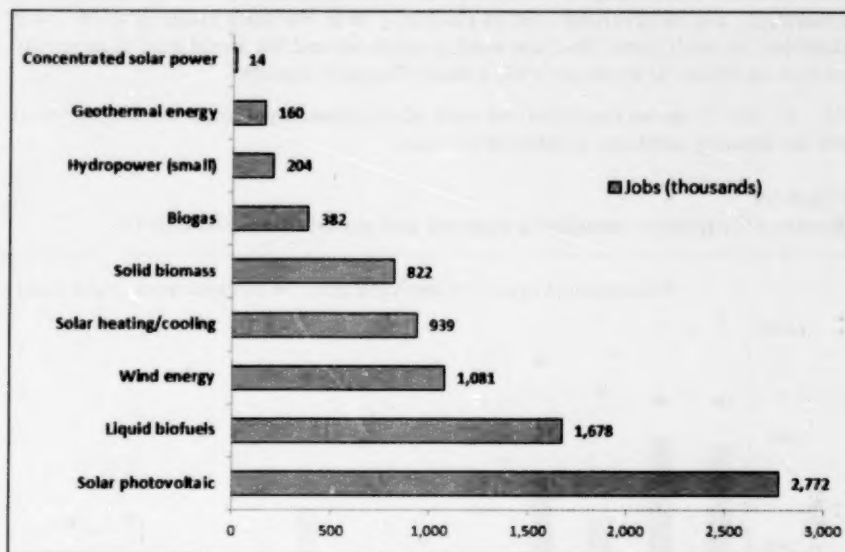
24. The latest estimates of employment in the renewable energy sector, excluding large hydropower, indicate that in 2015 roughly 8.1 million people worked directly and indirectly for the industry around the world. That constitutes a 5 per cent increase from the previous year.<sup>8</sup>

<sup>8</sup> IRENA, *Renewable Energy and Jobs — Annual Review 2016* (Abu Dhabi, 2016).

25. Figure VII shows the distribution of jobs in the different sectors. Solar photovoltaic was the largest renewable energy employer with 2.8 million jobs worldwide, an 11 per cent increase over 2014. Solar photovoltaic employment grew in Japan and the United States of America, stabilized in China, and continued decreasing in the European Union.

Figure VII

**Estimated jobs in renewable energy worldwide by industry, 2015**



Source: IRENA, *Renewable Energy and Jobs — Annual Review 2016* (Abu Dhabi, 2016).

26. According to a recent global estimation of large hydropower employment, the sector provided another 1.3 million direct jobs in 2015.<sup>8</sup>

27. For the second year in a row, four Asian countries — China, India, Japan and Bangladesh — are on the global top-10 in job creation with a share of global renewable energy employment reaching 60 per cent in 2015, up from 51 per cent in 2013. African countries also witnessed an increase, with a conservative estimate of 61,000 jobs in 2015 as new projects came online.<sup>8</sup>

28. China continued to lead employment with 3.5 million jobs, a minor reduction of 2 per cent over the previous year, as more than a third of the additions in terms of renewable energy capacity took place there.

29. The European Union as a whole remained the second largest renewable energy employer with 1.17 million, followed by Brazil, the United States and India. Within the European Union, 355,000 jobs are located in Germany alone and 170,000 in France.

30. Brazil's employment in renewable energy is found in bioenergy and large hydropower, while in China 1.65 million people are employed by the domestic solar photovoltaic industry.<sup>8</sup>

### Other factors affecting renewable energy growth

31. In 2014, global fossil fuel consumption subsidies amounted to \$493 billion, down from \$548 billion in 2013, but still over four times the value of subsidies to renewable energy.<sup>9</sup> By factoring in externalities, global total post-tax subsidies in both advanced and developing economies and among oil-producing and non-producing countries alike have been projected to reach \$5.3 trillion or 6.5 per cent of global gross domestic product (GDP) in 2015.<sup>10</sup> In terms of percentage of regional GDP, this is mainly due to the high coal consumption in emerging and developing Asia and Commonwealth of Independent States (CIS) countries, where coal subsidies were projected to reach \$2.5 trillion in 2015 or 3.1 per cent of global GDP.

32. Fossil fuel subsidies, in particular, hamper renewable energy development and create an uneven playing field. The largest externalities are typically fiscal, environmental and welfare impacts from energy subsidies at the global and local levels. If they are not factored into the price of fossil fuel power generation, the results are distorted markets and barriers for new entrants such as renewables. Overcoming these market imbalances requires coherent policies and a reduction of fossil fuel subsidies. Recent changes prove reform is possible: low oil prices give net importers the room to reform and reinforce the need for exporters to do so.

33. Renewable energy subsidies can help new technologies to penetrate markets and create economies of scale. In 2015, significant strides were made in the financing of renewable energy technologies on account of climate change policies and improved cost-competitiveness. The Paris Agreement universally adopted in December 2015 by all Parties to the United Nations Framework Convention on Climate Change provides policy signals<sup>11</sup> to help accelerate the low-carbon transformation of the global economy. However, many countries are currently cutting back on renewable energy subsidies owing to their individual economic and political considerations and as renewable energy technologies become increasingly cost-competitive without government support.

34. Adding to other factors affecting renewable energy growth since 2014, the oil price sharply declined by 76 per cent to \$27.10 per barrel in early 2016. In Europe, the Amsterdam-Rotterdam-Antwerp coal contract dropped from \$84 per tonne to \$36.30, whereas the natural gas price fell from \$4.50 per MMBtu to \$1.91 during the same time period.<sup>5</sup>

35. However, competition between fossil fuels and renewables depends on factors other than fossil fuel prices, such as location. Renewables may have their own advantages because of rapid growth and plentiful financing options.

36. The share of renewables in electricity generation is continuously growing; however, the status of the transport sector is less encouraging. To date, the primary energy supply used in the transport sector has been liquid fossil fuels. The demand for liquid biofuels (such as ethanol) in transport has been on the incline, alongside a growth in private vehicles. In some European countries, the United States and

<sup>9</sup> International Energy Agency, *World Energy Outlook 2015* (Paris, OECD/IEA, 2015).

<sup>10</sup> D. Coady, I. Parry, L. Sears and B. Shang, *IMF Working Paper: How Large Are Global Energy Subsidies?* (International Monetary Fund, WP/15/105, May 2015).

<sup>11</sup> UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2016* (Frankfurt, Frankfurt School of Finance and Management, 2016).

Brazil, biofuel's contribution in road transport fuel is considerably high, reaching 20 per cent in 2014.

37. Beyond biofuels, trends in the development of gaseous fuels and electricity have continued to open up opportunities for the integration of renewables into the transport sector. Global electric vehicle (EV) sales were just under 540,000 in 2015, a roughly 70 per cent increase since 2014. Norway saw 71 per cent growth in EV sales in 2015. Overall, the accelerated growth is a good sign for EV adoption. Nonetheless, the share of the total global auto market held by EVs and plug-in hybrid electric vehicles was still only 0.6 per cent in 2015.

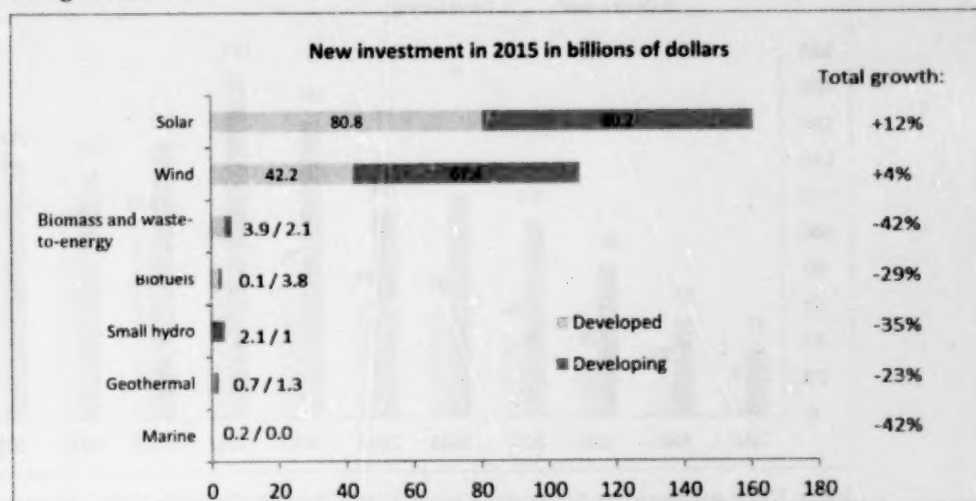
### C. Investments

38. In 2015, the global investment in renewables rose by 5 per cent to \$286 billion, thus reaching a new record high compared to total investments of \$273 billion in 2014. That record was achieved despite exchange rate shifts that depressed the dollar value of investments in other currency zones, and despite sharp falls in oil, coal and gas prices that enhance the competitive position of fossil fuel generation.<sup>12</sup>

39. Figure VIII shows new investment in renewable energy in 2015 and net changes from 2014. Investments increased for solar and wind, while the decreasing trend persisted for all other smaller sectors. Investments in solar increased by 12 per cent and in wind by 4 per cent.

<sup>12</sup> Note that investment figures from REN21, *Renewables 2016: Global Status Report* (Paris, 2016) do not cover large hydropower.

**Figure VIII**  
**Global new investment in renewable energy by sector in 2015 and percentage change from 2014**



Source: UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2016* (Frankfurt, Frankfurt School of Finance and Management, 2016).

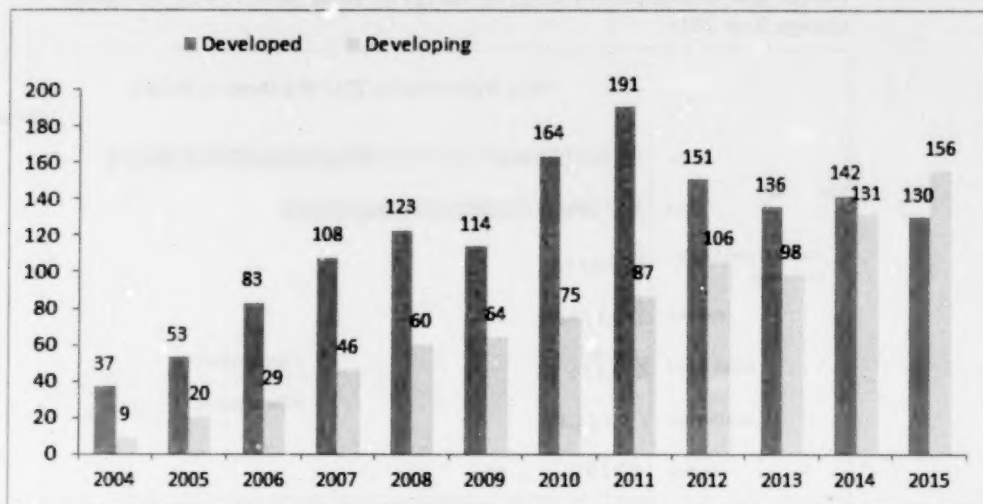
40. In 2015, for the first time, investments in renewables in developing countries outweighed those in developed economies. The developing world, including Brazil, China and India, committed a total of \$156 billion, up 19 per cent from 2014, while developed countries invested \$130 billion, down 8 per cent.<sup>5</sup>

41. China was by far the largest investing country for renewables (excluding large hydro), with \$102.9 billion in 2015, representing well over a third of the global total. The United States was a distant second with \$44.1 billion; Japan was a clear third with \$36.2 billion, followed at a distance by the United Kingdom of Great Britain and Northern Ireland and India at \$22.2 billion and \$10.2 billion, respectively.

42. Figure IX shows global new investment in renewable energy for developing and developed countries for the period 2004-2015. Developing countries have increased their performance almost steadily over the past years, while investment in developed countries peaked in 2011, aided by the "green stimulus" programmes in the solar boom of the United States and Germany.<sup>5</sup> Developed country investments are now 47 per cent lower than in 2011.

Figure IX

Global new investment in renewable energy, 2004-2015 (in billions of dollars)



Source: UNEP and Bloomberg New Energy Finance, *Global Trends in Renewable Energy Investment 2016* (Frankfurt, Frankfurt School of Finance and Management, 2016).

### III. Promotion of new and renewable sources of energy

#### A. Sustainable Development Goal 7 and the Sustainable Energy for All initiative

43. The General Assembly adopted the 2030 Agenda for Sustainable Development in September 2015 (see resolution 70/1), which includes a stand-alone sustainable development goal on energy. Sustainable Development Goal 7 aims to “Ensure access to affordable, reliable, sustainable and modern energy for all” and confirms the importance of energy as a key enabler of sustainable development for all countries and all people. The launch of the Secretary-General’s initiative on “Sustainable Energy for All” in 2011 and the declaration of 2014-2024 as the United Nations Decade of Sustainable Energy for All have also given strong momentum to the promotion of renewable energy.<sup>13</sup> The remarkable support by an unparalleled network of leaders from all sectors of society and the ample mobilization of a plethora of stakeholders ensure that progress on the initiative’s three interlinked objectives — which also fall in line with the targets of energy Sustainable Development Goal 7 — is made at an accelerated pace.

44. So far, over 100 developing countries have “opted in” and joined the efforts of SE4All. Over 50 High Impact Opportunities (HIOs) have been identified, encompassing a wide range of stakeholders who undertake actions that will have significant potential to advance SE4ALL and its goals. Progress is being reported by many countries, including Brazil, Ethiopia, Ghana, Liberia, Nicaragua and Sierra

<sup>13</sup> For more information, see [www.se4all.org](http://www.se4all.org).

Leone. Some of the progress in the different countries results from partnerships with institutions or initiatives such as the World Bank, Energy+, the United Nations Foundation and the Inter-American Development Bank.

45. In May 2015, the second annual SE4ALL Forum was held to assess progress, mobilize further action, partnerships and commitments, share best practices and showcase innovation. The Forum brought together more than 1,500 leaders from all sectors and countries, including more than 30 Ministers of Energy and Finance from all around the world. The emphasis of the Forum was on showcasing concrete and substantial outcomes, including the launch of the annual report of SE4ALL for 2014, as well as scores of commitments announced by partners working towards the targets. The Forum also hosted the launch of the second edition of the biennial *Global Tracking Framework* (GTF).

46. The Global Tracking Framework is a global data platform and monitoring system designed to allow rigorous and transparent monitoring of progress towards the three major SE4ALL objectives through 2030. A consortium of 20 agencies, including the Department of Economic and Social Affairs, co-led by the World Bank and the International Energy Agency, produced the second edition of the *Global Tracking Framework* report in 2015.

47. A new complementary theme of GTF 2015 provides analysis of the financial cost of meeting the SE4ALL objectives, as well as the geographical and technological distribution of the investments that need to be made. The report finds that in order to double the share of renewable energy in the global mix by 2030, annual global investments would need to increase to \$442-\$650 billion, thus implying an investment gap of \$157-\$365 billion with respect to current investments.

## **B. National efforts**

48. As of year-end 2015, renewable energy targets had been established in 173 countries at the national or State/provincial level, and renewable energy policies could be found in 146 countries.<sup>5</sup>

49. Policymakers in many countries recognize the benefits of renewable energy and its positive impact on energy access, particularly as off-grid and mini-grid solutions in rural and remote areas. Owing to rapidly falling costs of these systems, they pose the most economically viable option for the electrification of rural and remote areas in most cases today. Furthermore, they serve as important enablers for health care, food security, water access, education, gender equality and job creation.

50. The most widely used renewable energy policy is the feed-in tariff (FIT) that is now in place in 75 countries. In 2015, no new countries added new feed-in policies for the first time since 2000. Other policy options are quotas, known as renewable portfolio standards (RPS), which are used in 26 countries. RPS policies remain popular at the subnational level. As of year-end 2015, RPS or quota policies were in place in 74 States/provinces/territories.<sup>5</sup>

51. Net metering or net billing policies were in force in 52 countries as of year-end 2015, and were utilized to support the deployment of small-scale, distributed renewable energy systems. Policymakers often put in place these policies together

with other policy mechanisms, such as feed-in tariffs or auctions that support larger-scale projects.<sup>5</sup>

52. Another increasingly utilized policy option is renewable energy tendering, also known as public competitive bidding or auctioning. These tenders can be technology-neutral or focused on a specific technology. As of year-end 2015, both forms have been held in a combined number of 64 countries.<sup>5</sup>

53. It is estimated that in 2015 around 126 countries had some form of financial support policy for renewable energy in place, including tax reductions, grants and low-interest loans. Notably, the United States approved multi-year extensions, the longest extensions to date, of its production and investment tax credits in late 2015, whereas El Salvador, India, Jordan, Mongolia and Pakistan all added new policies or extended existing ones.<sup>5</sup>

54. Many countries, especially those formerly at the forefront of renewable energy subsidies and feed-in tariffs — e.g., Germany, France and Poland — have been reducing their feed-in tariffs or shifting to renewable tenders. In addition, some countries reduced funding for renewables during 2015. Denmark, for example, lowered funding for the Energy Technology Development and Demonstration Programme.

55. Several renewable energy targets were set to be achieved by 2030, which led to a host of new commitments and adjusted targets. France established a target for a 38 per cent renewable heat share by 2030. Brazil pledged to increase the share of non-hydro renewable energy in its electricity generation mix to 20 per cent by 2030.<sup>5</sup>

56. France set a new target of 15 per cent renewables in final transport energy consumption by 2030; the Lao People's Democratic Republic aims to meet 10 per cent of its transport fuel demand with biofuels by 2025; Liberia seeks to blend up to 5 per cent palm oil biodiesel by 2030 for vehicle fuels; and Malawi set a goal of increasing the proportion of ethanol run vehicles to 20 per cent by 2020. The European Union revised its renewable energy act limiting crop-based biofuels to a 7 per cent share of the Union's 2020 10 per cent renewable transport energy target. Germany reduced its required blend volumes for biodiesel from 6.25 per cent to 3.5 per cent to bring the requirement in line with the targeted emissions reduction goals.

57. In Africa, the Congo, Eritrea, Gabon, Madagascar and Namibia established targets of 70 per cent or greater for electricity generation from renewable sources.

58. In 2015, the European Union built on its 2020 renewable energy targets by establishing a long-term objective of a minimum of 27 per cent of final energy consumption by 2030, whereas France announced a national target of 40 per cent for electricity generation.

59. In the Americas, some of the world's highest renewable power share targets were set. Costa Rica is aiming for 100 per cent renewable power by 2030, Uruguay 95 per cent by 2017, Belize 85 per cent by 2027, Guatemala 80 per cent by 2030, and Bolivia 79 per cent by 2030. Paraguay aims to achieve a 60 per cent increase by 2030.

60. The Group of 20 (G-20) endorsed the Toolkit of Voluntary Options for Renewable Energy Deployment, thus paving the way for the Group to advance the global renewable energy agenda. G-20 countries hold 75 per cent of total

deployment potential for all renewables in the energy sector and around 70 per cent of total investment potential for renewable power between 2016 and 2030.

61. The United States pledged to cut net greenhouse gas emissions by 32 per cent by 2030, while China announced its goal of peaking CO<sub>2</sub> emissions and expanding the share of its total energy consumption coming from zero-emission technologies by 2030.<sup>14</sup> The Covenant of Mayors for Climate and Energy — a group of mainly European, and some African and Asian mayors — pledged to reduce CO<sub>2</sub> emissions by at least 40 per cent and to adopt an integrated approach to tackling mitigation and adaptation to climate change.<sup>15</sup>

62. A growing number of cities, States and regions are committing themselves to a transition to 100 per cent renewable energy in individual sectors of the economy or in the economy as a whole. Byron Shire, Coffs Harbour and Uralla in Australia; Oxford County and Vancouver in Canada; and the United States cities of Rochester (Minnesota) and San Diego (California) are planning to generate their energy requirements from 100 per cent renewable sources. Some cities in the United States have already reached 100 per cent renewable electricity, including the cities of Burlington (Vermont), Aspen (Colorado) and Greensburg (Kansas).

### C. International institutional efforts

63. Organizations of the United Nations system continue to support the promotion and expansion of new and renewable sources of energy in developing countries. In 2015 and beyond, the SE4ALL initiative, the Paris Agreement and the 2030 Agenda for Sustainable Development are all bringing greater attention and awareness to the important issues of universal energy access, energy efficiency and the promotion of new and renewable sources of energy.

64. The United Nations Development Programme (UNDP) is involved in many activities promoting the use of new and renewable sources of energy. UNDP, in collaboration with key partners, provides technical advice to develop specific sustainable energy solutions, especially related to “bottom up” decentralized energy options. Support by UNDP for new and renewable energy has included the establishment of national targets and policy frameworks for renewable energy and energy efficiency, and developing regulatory frameworks that provide technical regulations and conditions for the installation of renewable energy generation plants and their connection to the grid. UNDP will design and implement financial mechanisms and incentive schemes to lower risks of clean energy investment, especially at the community level, which may include setting up enabling mechanisms such as feed-in tariffs, supporting local microfinance organizations, or establishing dedicated national clean energy climate funds. UNDP seeks to develop local manufacturing, engineering, operation and maintenance capabilities along the energy supply chain, and strengthen the capacity of national and local governments to implement, coordinate and monitor the results of clean energy policies.

<sup>14</sup> The White House, *Fact Sheet: The United States and China Issue Joint Presidential Statement on Climate Change with New Domestic Policy Commitments and a Common Vision for an Ambitious Global Climate Agreement in Paris* (Office of the Press Secretary, September 2015).

<sup>15</sup> *Covenant of Mayors for Climate and Energy*; see [www.covenantofmayors.eu](http://www.covenantofmayors.eu).

65. The World Meteorological Organization (WMO) recognized that with increased climate variability and change, the sensitivity of the energy sector to weather and climate will increase, and thus the demand for climate services for energy. At its seventeenth session, held in June 2015, the World Meteorological Congress (Cg-17) adopted energy as an additional priority area of the Global Framework for Climate Services (GFCS). The Framework will promote the use of climate information for sustainable development and environmental stewardship. WMO is also partnering with the International Renewable Energy Agency (IRENA) to develop the Global Solar and Wind Atlas. This work is intended to create a high-quality, Internet-based platform that will raise awareness of technology opportunities to limit the financial risk of countries and of investors.

66. The efforts of the Food and Agriculture Organization of the United Nations (FAO) focus on the Energy-Smart Food for People and Climate programme and the work on sustainable bioenergy. The energy-smart food systems programme promotes improved energy efficiency and diverse energy sources with gradual increase in the use of renewable energy in agriculture and food chains.

67. The United Nations Environment Programme (UNEP) Medium-Term Strategy 2014-2017 includes dedicated programmes and projects on renewable energy, energy efficiency, decentralized energy solutions, transport, buildings, cities, short-lived climate pollutants, sustainability criteria, networks and partnerships, and energy and climate finance.

68. The World Health Organization (WHO) has the global household energy database, which serves as the baseline for SE4ALL tracking of home energy transitions and health impacts.<sup>16</sup> The efforts of WHO have included producing documented evidence about health benefits of clean household fuels and technologies; completion of the "WHO Guidelines for indoor air quality: household fuel combustion" and the current development of a clean household energy policy planning tool which facilitates the adoption of clean fuels and technologies used in the home; coordinating efforts to enhance and harmonize national household surveys and censuses to tracking energy access in the home; and updating the WHO database on energy access in health-care facilities to include more recent surveys in Sub-Saharan Africa.

69. The United Nations Industrial Development Organization (UNIDO) has continued to promote sustainable energy solutions for Inclusive and Sustainable Industrial Development (ISID) of partner countries through delivery of technical assistance. In 2015, UNIDO's Sustainable Energy Portfolio totalled \$275 million in grant funding, with \$1.5 billion in planned co-financing, encompassing a wide coverage of more than 90 renewable energy, energy efficiency, and low-carbon technology programmes and projects.

70. The United Nations Conference on Trade and Development (UNCTAD) has introduced the energy commodity development programme, the natural resources information exchange and the biofuel initiative. UNCTAD works to address a number of issues, including obstacles to renewable energy trade and investment such as border energy tariffs and subsidies; the effect of government intervention on energy efficiency and prices; creating a level playing field between high-carbon and low-carbon investment alternatives; regional integration through grid

<sup>16</sup> See [www.who.int/indoorair/health\\_impacts/he\\_database/en/index.html](http://www.who.int/indoorair/health_impacts/he_database/en/index.html).

interconnection for energy security; market-grid access for low-carbon technologies; and regional cooperation in the area of infrastructure investment, operations and management.

71. The Economic and Social Commission for Asia and the Pacific (ESCAP), at its seventieth session, adopted resolution 70/9, which includes 15 areas of action that contribute directly to the efforts to achieve goals of SE4ALL in Asia and the Pacific, known as the Regional Plan of Action. ESCAP has been supporting the implementation of the Plan of Action through: (a) developing an annual regional trends report on energy for sustainable development in Asia and the Pacific; (b) developing an Asia-Pacific energy portal, an information platform for up-to-date statistical data and policy initiatives in the region; and (c) hosting an annual high-level policy dialogue, focusing on identifying solutions to key challenges and the potential establishment of working-level groups to support implementation of policy solutions.

72. The work of the Economic and Social Commission for Western Asia (ESCWA) on sustainable energy focuses on access to energy services, sustainable consumption and production and the promotion of renewable energy. ESCWA has been coordinating with the relevant ministries and authorities of Member States in addressing and responding to challenges by advocating better regional energy integration for added energy supply security, enhanced understanding of the influence of falling oil prices on sustainable development in the region, improved energy access in rural areas for more equitable growth, targeted policies and appropriate regulatory frameworks as well as innovative financing mechanisms and providing energy solutions to countries in conflict to strengthen their resilience.

73. The Department of Economic and Social Affairs of the Secretariat will continue to play a key role in the coordination of activities of UN-Energy. The Department provided key support during the intergovernmental negotiations on the definition of the Sustainable Development Goals, targets and indicators on energy for the 2030 Agenda. Through its Statistics Division and the Division for Sustainable Development, the Department is also supporting the Global Tracking Framework effort. The Department is leading a public-private partnership on "Minimum Electricity Access" that promotes electrification in rural isolated communities with stand-alone renewable energy systems. The partnership has already electrified four pilot schools in isolated rural areas in Bolivia using solar photovoltaic (PV) and solar thermal technologies.

74. In 2015, the Department of Economic and Social Affairs premiered a new partnership programme, titled "Powering the Future We Want: recognizing leadership and innovative practices in energy for sustainable development", offering a grant in the amount of \$1 million to fund future capacity development activities in energy for sustainable development. The grant is awarded to an individual, institution or partnership based on past and current achievements, with the objective of promoting leadership and innovative practices in meeting the global energy challenge.

75. The strategy of the United Nations Educational, Scientific and Cultural Organization (UNESCO) includes assistance to Member States in enhancing the use of renewable energy technologies through effective policies and institutional frameworks. Under the UNESCO Global Renewable Energy Education and Training (GREET) programme, regional expert summer schools are organized annually for

the Africa and South-East Asia regions, which include training activities on renewable energy and related learning/teaching materials. UNESCO also launched a project that concerns the solar electrification of 75 rural schools in Benin, Madagascar, Mauritania, the Niger and Togo.

76. The United Nations Human Settlements Programme (UN-Habitat) focuses on several energy areas, including renewable energy technologies in the urban energy mix. To this end, UN-Habitat has projects on: (a) designing and implementing pilot renewable energy projects to enhance pro-poor access to water and sanitation; (b) promoting biogas in public institutions such as schools, prisons, hospitals and public spaces; (c) developing multifunctional clean energy centres, including a multitude of renewable energy technologies; (d) producing best-practice casebooks and technology road maps for renewable energy use in human settlements; and (e) designing sustainable municipal solid waste management systems, with an emphasis on producing energy from waste.

77. The International Renewable Energy Agency (IRENA) works towards mainstreaming renewable energy options and strategies in energy plans, increasing global access to renewable energy knowledge and improving policy frameworks and enabling market conditions for accelerated deployment of renewable energy. As the only global intergovernmental organization dedicated solely to renewable energy, and approaching universal membership, IRENA remains engaged in the efforts to translate the ambition of Sustainable Development Goal 7 into concrete, measurable steps that will help to attain this goal by 2030. IRENA launched its Roadmap for a Renewable Energy Future (REmap) 2030 during the first SE4ALL Forum in May 2014. REmap 2030 is a road map that identifies technology options, policy needs, and opportunities for international cooperation to double the global share of renewable energy by 2030. IRENA also published *Renewable Power Generation Costs in 2014* along with the second edition of *Renewable Energy and Jobs — Annual Review 2015*.

#### **D. International financial institutions**

78. International financial institutions continue to play an important role in mobilizing resources for the promotion of new and renewable energy. Multilateral development banks are committing more than \$30 billion towards achieving the targets of energy Sustainable Development Goal 7 of the 2030 Agenda.

79. The World Bank Group has committed to doubling the leverage of its energy financing and to providing technical assistance to several SE4ALL opt-in countries. The Bank Group pursues a portfolio approach, which includes support for investments in power generation that are least-cost and sustainable, strengthen and expand transmission and distribution power networks; this approach improves efficiency through technical assistance and advisory services. The Bank Group is maintaining support for a wide range of energy projects, and its energy financing programmes and guarantees totalled \$6.5 billion in fiscal year 2015. Of that amount, about \$2.4 billion was for renewable energy and energy efficiency projects and programmes. Some of the notable programmes supported by the World Bank include: a solar park in Jordan; an off-grid electrification project in Bangladesh; a national electrification plan in Myanmar; the Lighting Africa Programme; and the SE4ALL Global Knowledge Hub, which includes the Global Tracking Framework.

the Multi-Tier Framework for Measuring Energy Access and Readiness for Investment in Sustainable Energy (RISE).

80. The African Development Bank plans to invest \$20 billion in energy programmes by 2030. Investments range from regional to small- and medium-scale energy projects to increase electricity access in rural regions, including through its Sustainable Energy Fund for Africa (SEFA). The Fund is a \$90-million multi-donor facility funded by the Governments of Denmark, the United Kingdom and the United States. It unlocks private investments in the sustainable energy agenda in Africa through: (a) grants to facilitate the preparation of medium-scale renewable energy generation and energy efficiency projects; (b) equity investments to bridge the financing gap for small- and medium-scale renewable energy generation projects; and (c) support to the public sector to improve the enabling environment. The SEFA project preparation and equity components currently represent an investment pipeline of US \$711 million in investments and 230 megawatts.<sup>17</sup>

81. The European Bank for Reconstruction and Development (EBRD) has implemented more than 300 energy projects to date in Central and Eastern Europe and the southern and eastern Mediterranean, avoiding 19.6 million tons of CO<sub>2</sub> annually. EBRD has a total investment target of \$30 billion, including co-financing with partners that supports SE4ALL goals. In 2014, sustainable energy investments accounted for 34 per cent of EBRD activities.

82. The Global Environment Facility (GEF), as an operating entity of the financial mechanism of the United Nations Framework Convention on Climate Change, has invested over \$1.2 billion in more than 200 renewable energy projects in almost 100 developing countries and economies in transition. The Facility has become the largest public sector renewable energy technology transfer mechanism in the world, with investments that have contributed to the installation of 3 GW electric and 2.8 GW thermal of renewable energy capacity, resulting in an estimated direct avoidance of 290 million tonnes of CO<sub>2</sub> emissions over time.

83. The United Nations Capital Development Fund (UNCDF) CleanStart Programme provides microfinancing to low-income households for clean energy solutions. The objective is to provide 2.5 million people with cleaner, more efficient energy by 2017. The Programme has a budget of \$60 million that can potentially reduce 300,000 tons of CO<sub>2</sub>.

#### IV. Conclusions

84. New and renewable energy can fuel a future of opportunity and greater prosperity for addressing global challenges, including universal energy access, energy security, climate change and, ultimately, poverty eradication and sustainable development.

85. 2014 and 2015 were two sequent years of decoupling between emissions and GDP growth, in which renewable energy played an important role. In 2015, a new record for global dollar investments in renewable energy was also set. That rebound was attributed to new capacity added and the record-breaking investments made in

<sup>17</sup> African Development Bank, *Sustainable Energy Fund for Africa: Annual Report 2015* (Côte d'Ivoire, 2016).

developing countries. This growth was mainly driven by climate change policies and improved cost-competitiveness.

86. In 2015, renewables demonstrated their potential to satisfy energy requirements and successfully replace conventional energy sources in the long run, as for the first time renewable additions, excluding large hydro, represented the largest share in world electricity generation. Meanwhile, renewable generation cost cuts continued owing to advances in renewable power generation technologies. In particular, the levelized cost of electricity of solar photovoltaic was reduced by half between 2010 and 2015. With rapid deployment of renewable energy systems in many developed and developing countries, new opportunities arise, despite a backdrop of plummeting oil, coal and gas prices that protected the competitive position of fossil fuel generation.

87. In spite of these positive signs, policy support for renewables remains inconsistent because of government shifting and changing policies in the face of new economic crises, leading to uncertainty among investors. In addition, the recent significant drop in fossil fuel prices may have more negative impacts on renewables. However, the universal adoption of the Paris Agreement and the 2030 Agenda for Sustainable Development provides policy signals and guidance to move the world towards reaching the energy Sustainable Development Goal by 2030.

88. Although renewable energy is growing rapidly, urgent action is required now to continue promoting global investments in renewable energy deployment and development, and to improve energy infrastructure and energy efficiency. In order to limit emissions from energy generation and to support the transition to clean energy systems, there is a need to increase investments in renewable energy deployment and development.

89. Reassuringly, greenhouse gas emissions have stayed on the path of decoupling from economic growth in the last two years, and increasing renewable energy shares and energy efficiency initiatives around the globe are important in this development.

